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# NUTRICON For exchange of information on nutrition education and school lunch activities.

U. S. DEPARTMENT OF AGRICULTURE, Washington, D. C.

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#### NUTRITION PROGRAMS IN INDO-NESIA AND JAPAN

Nutrition services, including nutrition education programs, are well established in a number of countries. In others such services are just being developed. Indonesia and Japan are good examples of countries in which there have been nutrition programs for many years.

It was in Indonesia, at what is now called the National Institute of Nutrition, that Eijkman made his pioneer experiments on the relation between polished rice and beriberi. In Japan Dr. Tadasu Saiki established a private nutrition institute in 1914. Since World War II, the nutrition education programs in these countries have received new impetus.

#### Indonesia

The National Institute of Nutrition of Indonesia, a part of the Ministry of Health, besides doing studies of nutritional status and determinations on foods has carried on a wide educational program for many years. The Institute also trains professional and auxiliary personnel, including dietitians. There are two grades of dietitians—junior and senior.

Junior dietitians. Six years of elementary schooling plus graduation from a 4-year domestic science junior high school are required of boys and girls for admission to schools for junior dietitians. Junior dietitians study foods and nutrition and nutrition education techniques, as well as home and family living in a 1½-year course. One year of study is followed by one-half year of practical experience in a hospital. Expenses are paid by the Ministry of Health, and graduates are expected to return to their home community to work for at least 3 years.

Junior dietitians assist senior dietitians in large hospitals, clinics, and health centers, or work closely with

In observance of United Nations Day, October 24, this issue describes nutrition programs in two countries of South and East Asia. The sources of information are listed at the end. These countries have accomplished much of interest. Some of their programs and activities resemble our own. Others suggest ideas that we might borrow.

midwives, nurses, and home visitors in small communities. They also work with mothers who come to prenatal clinics and maternal and child health centers, and make home visits. In 1956 there were 30 junior dietitians in Indonesia.

Senior dietitians. For entrance to the School for Dietitians of the Institute of Nutrition, students must have completed 3 years each of junior and senior high school. The 3-year course at the School for Dietitians prepares students to be senior dietitians. Six months of this time is spent in field work in clinics and hospitals. Senior dietitians work with doctors, nurses, midwives, community workers, and clinic patients. Graduate senior dietitians in Indonesia numbered 14 in 1956.

School for health workers. The Ministry of Health also has a school for health workers, who deal with families in community programs. These workers receive basic health training, including course work in nutrition, and they, as well as the nurses and midwives, do much nutrition education in daily contacts with families.

Teaching aids. An active health education unit in the Ministry of Health helps prepare teaching materials, visual aids, and exhibits for the nutrition education program.

School lunch. At present, health education and school lunch programs are found in only a few schools in Indonesia. There is such a shortage of school buildings that in many schools, classrooms are used for 2

sessions in 1 day. Every inch of space is needed in these overcrowded schools, so there is seldom room or opportunity to prepare and serve food. However, the possibility of starting pilot feeding programs in a few schools is under discussion.

Saridele. Fresh milk is scarce in Indonesia. The Ministry of Agriculture, with help from FAO, is encouraging farmers to improve and increase their herds and milk yield. There are some small dairies, but thousands more are needed. Sanitation is also a problem; only 2 cities have pasteurization plants.

For these reasons the Indonesian Government is manufacturing saridele, a soybean "milk," in a plant built with FAO and UNICEF assistance, to provide a source of high-quality protein in the diet. Saridele tastes something like American malted milk and has a familiar flavor for Indonesians because they eat soy products such as tahu (soy cheese) and tempe (fermented soy cake).

Nutrition Day. February 1 is Nutrition Day in Indonesia. It provides an opportunity to bring nutrition facts before the public. The idea was introduced 4 years ago by students at the school for junior dietitians. This year the students gave food demonstrations to the public and prepared exhibits on adequate diets for different age groups. Outside their office-for-a-day they sold saridele and saridele popsicles to familiarize people with this new food.

World Health Day. The theme of this year's United Nations World Health Day, Food and Health, gave Indonesian nutritionists another opportunity to emphasize the importance of good nutrition. Preliminary planning was done by a committee of representatives from the Ministries of Health, Agriculture, Education, and Social Welfare, the Army and Air Forces, Red Cross, Teachers Association, and radio. Ideas, posters, and materials were made available to all the provinces, which were encouraged to make their own plans based on local interests and resources.

Exhibits held for a week in 4 large classrooms at the Home Economics Teachers' College in Djakarta were open 3 hours each evening for the public and one day for school children. The exhibits included a display of typical, freshly cooked meals for a family of 5 from 1 area of Indonesia. This exhibit was changed daily so that meals from many parts of Indonesia, showing the needs of men, women, and children under different conditions, were included during the week. The amounts of food needed to prepare the different meals, the cost, and the detailed contribution of each food to the daily nutrient intake were displayed on charts.

A contest was organized for school children. Half of a double card showed desirable heights and weights for boys and girls at each year of age with space for the pupil to record his height and weight each month; the other half showed foods of the Indonesian Basic Food Chart in outline and a jumbled sentence. Prizes were given for the best coloring of the Food Chart and for rearranging the jumbled sentence into a health proverb.

United Nations assistance. Indonesia has received assistance with its nutrition program from FAO, WHO, and UNICEF. Fellowships have been provided to enable the Director of the Nutrition Institute and some of his coworkers to go abroad for further study. Consultants have been sent to Indonesia to help with inservice training of local personnel. Miss Dorothea Nicoll of the United States will have completed a 14-month assignment for FAO at the end of October 1957. She has been helping with the training program of the Institute of Nutrition. Dr. Beryl Roberts, also of the United States, is in Indonesia under WHO auspices to help plan a coordinated health education program in which nutrition will be included at both school and community levels.

### Japan

Japan established its National Institute of Nutrition in September 1920. This now operates under the Nutrition Section, Public Health Bureau, Ministry of Health and Welfare, primarily doing nutrition research.

The responsibilities of the Nutrition Section also include planning nutrition education activities; carrying out the national nutrition survey, including food consumption and selected clinical data, made each year since 1946; giving guidance on group feeding; and conducting national examinations for nutritionists. Each year the Nutrition Section develops a new educational program to guide nutritionists employed by prefectures and cities throughout the country.

Each of the 46 prefectural governments, as well as 30 cities, employs nutritionists who plan nutrition programs for the area and supervise activities of the nutritionists employed in local health centers. These model health centers were started in 1948 and function under the Public Health Bureau of the Ministry of Health and Welfare, through the prefectural or city governments. In 1956 there were 783 health centers, employing about 1,100 nutritionists. Anyone residing in the area served by a health center may obtain advice on nutrition. The nutritionists assigned to the health centers hold weekly

classes with demonstrations for TB patients, women attending maternal and child health clinics, and people in charge of group feeding programs in schools, hospitals, factories, restaurants, and similar establishments.

School lunch. Japan has had a school lunch program since 1946, and a School Lunch Law was passed in 1954. Half of all Japanese school children now receive school meals, including students at junior high schools and night schools. The early prejudice against the program as a form of charity was overcome once its educational objectives were understood, and it became readily accepted. The beneficial effects of the program are now widely recognized. The government provides subsidies of food and funds to help keep prices low and to cover the cost of meals for children who are unable to pay. The International Cooperation Administration is aiding this program by supplying wheat and nonfat dry milk.

Nutrition education is also carried out by Home Life Improvement Workers (extension workers) who reach farm families throughout the country. In 1956 there were over 1,500 of these extension workers in farm villages in Japan.

Educating nutritionists. The first school for nutritionists was established in 1925. In 1945, regulations concerning nutritionists and training schools for nutritionists were drawn up, and in 1947 the Nutritionist Bill embodying these regulations became law.

In the universities and colleges, courses for nutritionists may be given in the departments of domestic science, home economics, foods, nutrition, science of living, or health. The curriculum established by the Ministry of Health and Welfare requires 2 or more years of schooling beyond high school. Since 1948, high school graduates who have done 2 years of practical work under an authorized nutritionist may qualify as nutritionists by passing the national examination given by the Nutrition Section of the Ministry of Health and Welfare.

In 1956 there were 102 institutions with courses meeting the required standards. These included 19 special institutes, 25 universities, 54 junior colleges, and 4 other schools.

Authorized nutritionists work in hospitals, schools, and factories, as well as other institutions.

Refresher courses. Since 1947 the National Institute of Public Health, a research institute of the Ministry of Health and Welfare, has given short refresher courses to nutritionists employed by prefectural and city governments and to nutritionists who have spent at least 2 years supervising nutrition programs in hospitals or

schools. In 1955 the Institute introduced a 1-year course on health guidance, including nutrition, for nutritionists, health nurses, and health educators.

Food demonstration buses. In 1954 the Tokyo Public Health Bureau built a kitchen bus which is used to give food demonstrations in the grounds of schools, shrines, and temples and in residential areas throughout the city. The Nutrition Section of the Tokyo Public Health Bureau supervises the program, and nutritionists from local health centers do the cooking and lecturing.

This program has been so successful in reaching people in Tokyo that the Japanese Nutrition Association (a professional association of nutrition workers) has built eight such buses with the aid of the U. S. Government for use throughout the country.

Home Life Improvement. Japan is a country of intensive farming, which is done mainly on small family farms by both the men and women. A government-controlled program to educate farmers in better agricultural practices has operated since 1899. After World War II the Land Improvement Law established a cooperative extension division under the Ministry of Agriculture and Forestry and the prefectural governments. To assure cooperative efforts, funds are supplied by the national government and the prefectures. The Extension Division has three parts: Farm Adviser Program, Home Improvement Program, Rural Youth Organization.

Home Advisers. Home life improvement has been the most difficult part of extension to promote in Japan. Deep-rooted prejudices, superstitions, and traditions had to be overcome. However, changes in ways of life of rural communities have taken place through the efforts of the Home Life Improvement Advisers, who have introduced better food practices and dietary habits.

Home Advisers have encouraged farm women to grow green and yellow vegetables and to raise chickens and ducks for home use. They have taught them to preserve some of their harvested food to lessen waste. The preserved food provides a more balanced diet all year round and saves time during the busy planting and harvesting seasons. Families have been encouraged to eat wheat as well as rice, and bread baking has been taught. In the busy seasons, families sometimes pool resources of food and equipment so that the noon meal can be cooked in community kitchens and the prepared lunch be picked up by the workers on their way home. Cooking demonstrations are given and food is preserved in these community kitchens.

#### INTERNATIONAL AGENCIES

Food and health authorities in many countries besides Indonesia and Japan have recognized the need for education in nutrition, but lack of funds and of trained technical personnel have handicapped their efforts to develop effective programs.

Needed support in the initial stages of programs has often been provided by international agencies of the United Nations family—the Food and Agriculture Organization (FAO), World Health Organization (WHO), and United Nations Children's Fund (UNICEF); the U. S. International Cooperation Administration; and nongovernmental bodies such as the Rockefeller Foundation, Ford Foundation, Kellogg Foundation, and various church and other philanthropic groups.

## United Nations specialized agencies

In addition to the nutritionists employed at their Headquarters and in the regional offices, FAO and WHO provide short-term consultants to work on specific projects in member countries if requested to do so. At the present time FAO has 28 nutritionists, including 5 from the United States, who are assigned to nutrition projects in 15 countries.

UNICEF has helped by supplying milk and equipment for countries to develop supplementary feeding programs for mothers and children. FAO and UNICEF are jointly assisting countries to develop dairy industries.

Nutrition courses. FAO and WHO together have organized courses in nutrition, such as those given in 1952 and 1955 for workers from French-speaking territories in Africa, and in 1957 for workers from English-speaking regions of Africa. Doctors, biochemists, agronomists, veterinarians, and nutritionists attended these 3-month courses.

Regional meetings. Every 3 or 4 years, FAO and WHO sponsor regional nutrition meetings in Latin America and South and East Asia, at which nutritionists have an opportunity to discuss mutual problems and to make plans for the future. In a number of countries, trained nutrition workers may almost be counted on the fingers of one hand. Naturally, they feel isolated professionally, so this opportunity for exchange of tech-

nical information with workers from neighboring countrics is very welcome.

Fellowships. FAO and WHO assist with the education of nutrition personnel by awarding fellowships for study abroad. For example, this year 37 FAO fellows from Chile, Colombia, Costa Rica, Egypt, Finland, Honduras, Indonesia, Iraq, Israel, Paraguay, Thailand, and Yugoslavia are studying in the United States, Puerto Rico, Guatemala, Denmark, United Kingdom, France, or Germany.

Protein-rich foods for use as supplements. FAO, WHO, and UNICEF have spent considerable effort in the search for acceptable protein-rich foods that can be produced cheaply. The Rockefeller Foundation has supplemented funds available to FAO, WHO, and UNICEF by a grant of \$250,000, which is being administered by a committee of the United States National Research Council.

Problems remaining. There has been marked progress in nutrition education in many countries, but much remains to be done. Protein malnutrition, beriberi, nutritional anemia, and vitamin A deficiency are common in large areas of the world. Lack of trained personnel is the biggest barrier to development of more effective programs. Even countries such as Indonesia that have nutrition education programs have difficulty training sufficient workers to reach all sections of the population. The cost of teaching materials and visual aids is also prohibitive in many countries. Answers to those problems are urgently needed.

#### REFERENCES

REPORT OF AN INTERNATIONAL SEMINAR ON EDUCATION IN HEALTH AND NUTRITION, BAGUIO, PHILIPPINES, 13 OCT.-3 NOV. 1955, by F. W. Clements. FAO Nutrition Meetings Report Series No. 13. Rome, 1956. Pp. 91+vii.

REPORT ON THE TECHNICAL MEETING ON HOME ECONOMICS FOR SOUTH AND EAST ASIA, TOKYO, JAPAN, 5-12 OCT. 1956. FAO, Rome, 1957. Processed. Pp. 42.

NUTRITION IN JAPAN, 1956. Published by the Nutrition Section, Bureau of Public Sanitation, Ministry of Health and Welfare, Tokyo, Japan. Sept. 1956. Pp. 30.

MALNUTRITION AND NUTRITION ACTIVITIES IN JAPAN. PRESENTED TO JOINT FAO/WHO NUTRITION COMMITTEE FOR SOUTH AND EAST ASIA, FOURTH MEETING, TOKYO, JAPAN, SEPT.-OCT. 1956, by Ministry of Health and Welfare. Tokyo, Japan. Sept. 1956. Pp. 184.

HOME IMPROVEMENT EXTENSION SERVICE IN JAPAN, 1956. Published by Home Improvement Section, Extension Division, Ministry of Agriculture and Forestry, Japan. Pp. 28, illus.

Institute of Home Economics, Agricultural Research Service, U. S. Department of Agriculture, in consultation with the Interagency Committee on Nutrition Education and School Lunch. (The printing of this publication has been approved by the Bureau of the Budget, July 27, 1955.)